



# **STREAM ECOLOGY & RESTORATION WORKSHOP**

## **September 22<sup>nd</sup>, 2004**

### **Wolfs Den Branch – Cedarville State Forest**

### **Charles Co.**

- 9:00**    **Volunteers arrive at Cedarville State Forest Headquarters**  
**Stream Macroinvertebrates Make and Take**
- 9:30**    **Overview of the Day**
- 9:35**    **Stream Ecology & Macroinvertebrate Community**  
*by Rita Bruckler, Resource Assessment Service, MD-DNR*  
Overview of stream morphology and the macroinvertebrate community found in a piedmont stream. Exercises will help participants learn to identify stream organisms and how they and riparian features impact water quality.
- 10:20**   **Video of 'Maryland Streams – An Undiscovered Realm'**  
General overview of Maryland streams and human impacts on streams.
- 10:50**   **Break**
- 11:00**   **Riparian Buffers and Streams**  
*by Matthew Chasse, Watershed Services, MD-DNR*  
Overview of riparian buffers and how they influence streams. Review basic plant ID techniques and practice with both native and invasive species.
- 11:45**   **Overview of TEAM DNR Streams Programs**  
*by Matthew Chasse, Watershed Services, MD-DNR*  
Learn about the progression of the TEAM streams programs and how they all fit together.
- 12:05**   **Lunch & Finish Stream Macroinvertebrate Make and Take**
- 12:30**   **Leave for Wolf's Den Branch**
- 12:45**   **Arrive at Wolf's Den Branch**  
**Stream Sampling & TEAM Sampling Activities**  
*Led by Rita Bruckler and Matthew Chasse*
- Review of stream sampling equipment
  - First look at Stream
  - Identify stream habitats for macroinvertebrates.
  - As a group, sample the stream for macroinvertebrates using D-net sampling techniques. Collected specimens are identified and recorded.
  - In smaller groups, sample stream for macroinvertebrates, identify samples, and record data
  - Discuss Results
- 1:45**    **Vegetation Plots and TEAM Vegetation Sampling Activities**  
*Led by Matthew Chasse and Rita Bruckler*
- Review of vegetation sampling equipment.
  - Finding and marking a vegetation sampling plot.
  - Identify Vegetation and canopy structure and record data
  - Discuss Results
- 2:30**    **Stream Water Quality Sampling and TEAM Sampling Activities**  
*Led by Rita Bruckler and Matthew Chasse*

- Review of stream water quality sampling equipment
- Sample the stream water quality and record data
- Discuss results and compare to macroinvertebrate data

### **3:00 Opportunities for Stream Restoration**

*Led by Matthew Chasse*

- Review of stream data and look at opportunities for restoration activity.
- Restoration activities are Tree Planting or Invasive Species Removal
- Discuss the basics of a Restoration Project
- Review materials needed for a restoration

### **3:30 Workshop Ends**

***Volunteers should be prepared to get wet in a stream. If you have hip waders or waterproof boots bring them. You should also bring bag lunches.***

## **Directions to Cedarville State Forest**

- **From Annapolis:**  
Follow Route 50 West to Route 301 South. From Route 301 South travel to Cedarville Road (at the very end of Prince George's County). At traffic light, take a left on Cedarville Road. As a landmark there will be a large white warehouse located on the left hand side. Take Cedarville Road to Bee Oak Road (on you right), the main entrance to the forest. Follow Bee Oak to the Park HQ/Visitors Center
- **From Prince George's County:**  
Travel Route 301/5 South and take a left on Cedarville Road. Follow directions above from Cedarville Road.
- **From Waldorf (Charles County):**  
Follow Route 5/301 north into Prince George's County. As soon as you cross into Prince George's County turn right onto Cedarville Road. Follow Cedarville Road to Bee Oak Road (on your right), the main entrance for the forest. Follow Bee Oak to the Park HQ/Visitors Center
- **From Washington, D.C.:**  
Follow either Branch Avenue (Route 5) or Pennsylvania Avenue (Route 4). If using Route 5, follow Route 5 for directions from Prince George's County above. If using Pennsylvania Avenue (Route 4), follow Route 301 south from Prince George's County. At the end of Prince George's County and before you enter Charles County, turn left onto Cedarville Road. Follow Cedarville Road to Bee Oak Road (on your right), the entrance to the forest. Follow Bee Oak to the Park HQ/Visitors Center

Park at Visitors Center/Headquarters and enter the building. Workshop meets at Park Headquarters meeting room lobby. Field site is within the State Forest down the road and make a right at Forest Road. Park at Charcoal Kiln and follow white trail to the stream (150 ft).